

Appl. No. 09/747,660

Amdt. Dated November 5, 2003

Reply to Telephonic Interview of November 5, 2003

Please amend the claims as follows. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (currently Amended) An apparatus for preparing a wafer, comprising:
a wafer backside plate having a top surface and a back surface, the wafer backside plate including a cylindrical edge lip that defines a central aperture;

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a central shaft fitting within the central aperture and engaging the wafer backside plate, the wafer backside plate being configured to automatically slide between ~~an up~~ a second position due to centrifugal force when the wafer backside plate and the shaft are spinning during rotational wafer processing and a ~~down~~ first position when the wafer backside plate and the shaft have stopped spinning once not in rotational wafer processing, the wafer backside plate sliding independent of non-rotational movement of the shaft, and wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the ~~up~~ second position than when in the ~~down~~ first position.

Claim 2 (original): An apparatus of claim 1, wherein the central shaft includes a height adjustment slot that is configured to engage the wafer backside plate.

Claim 3 (original): An apparatus of claim 2, wherein the cylindrical edge lip of the wafer backside plate includes a pin that is designed to slide within the height adjustment slot.

Claim 4 (currently Amended): An apparatus of claim 3, wherein the height adjustment slot includes,

a ~~lower~~ an initial position; and

~~an upper~~ a last position,

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wherein the pin is configured to slide from the ~~lower~~ initial position in the height adjustment slot to the ~~upper~~ last position in the height adjustment slot during rotational wafer processing.

Claim 5 (currently amended): An apparatus of claim 3, wherein the height adjustment slot includes,

~~a lower~~ an initial position; and

~~an upper~~ a last position,

wherein the pin is configured to slide from the ~~upper~~ last position in the height adjustment slot to the ~~lower~~ initial position in the height adjustment slot when completing rotational wafer processing.

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Claims 6-7 (cancelled)

Claim 8 (currently amended): An apparatus for preparing a wafer, comprising:

a chuck having a plurality of grippers for holding the wafer;

a wafer backside plate having a top surface and a back surface, the wafer backside plate including a cylindrical edge lip that defines a central aperture, the cylindrical edge lip being defined on the back surface;

a shaft connected to a central portion of the chuck, the shaft receiving and engaging the cylindrical edge lip of the backside plate, the wafer backside plate being configured to ~~separately and~~ automatically slide between ~~an up~~ a second position due to centrifugal force when the chuck, the wafer backside plate, and the shaft are spinning during rotational wafer processing and a ~~down~~ first position when the chuck, the wafer backside plate, and the shaft stop spinning upon completing rotational wafer processing, the backside plate sliding

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independent of non-rotational movement of the shaft, and wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the ~~up~~ second position than when in the ~~down~~ first position.

Claim 9 (original): An apparatus of claim 8, wherein the shaft includes a height adjustment slot that is configured to engage the wafer backside plate.

Claim 10 (original): An apparatus of claim 9, wherein the cylindrical edge lip of the wafer backside plate includes a pin that is designed to slide within the height adjustment slot.

EI Claim 11 (currently amended) An apparatus of claim 9, wherein the height adjustment slot includes,

~~a lower~~ an initial position; and

~~an upper~~ a last position,

wherein the pin is configured to slide from the ~~lower~~ initial position in the height adjustment slot to the ~~upper~~ last position in the height adjustment slot during rotational wafer processing.

Claim 12 (currently amended) An apparatus of claim 9, wherein the height adjustment slot includes,

~~a lower~~ an initial position; and

~~an upper~~ a last position,

wherein the pin is configured to slide from the ~~upper~~ last position in the height adjustment slot to the ~~lower~~ initial position in the height adjustment slot when completing rotational wafer processing.

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Claims 13-14 (cancelled)

Claim 15 (currently amended): An apparatus for spinning, rinsing and drying a wafer, comprising:

a chuck having a plurality of wafer holders for holding the wafer during the spinning, rinsing and drying;

a wafer backside plate having a disk-like top surface that mirrors the wafer being held by the holders above the wafer backside plate, the wafer backside plate including a cylindrical edge lip at a center, the edge lip having an inner surface that defines a central aperture;

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a shaft connected to a central portion of the chuck, the shaft receiving and engaging the inner surface of the edge lip of the backside plate, the wafer backside plate being configured to automatically slide between ~~an up~~ a second position when the chuck, the wafer backside plate, and the shaft are spinning during rotational wafer processing due to centrifugal force, and a ~~down~~ first position when the chuck, the wafer backside plate, and the shaft have stopped spinning upon completing rotational wafer processing, the backside plate sliding independent of non-rotational movement of the shaft, and wherein a gap defined between the top surface of the wafer backside plate and the wafer is less when in the up second position than when in the ~~down~~ first position.

Claim 16 (original): An apparatus for spinning, rinsing and drying a wafer as recited in claim 15, wherein the shaft includes a height adjustment slot that is configured to engage the wafer backside plate.

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Claim 17 (original): An apparatus for spinning, rinsing and drying a wafer as recited in claim 15, wherein the cylindrical edge lip of the wafer backside plate includes a pin that is designed to slide within the height adjustment slot.

Claim 18 (currently amended): An apparatus of claim 16, wherein the height adjustment slot includes,

~~a lower~~ an initial position; and

~~an upper~~ a last position,

wherein the pin is configured to slide from the ~~lower~~ initial position in the height adjustment slot to the ~~upper~~ last position in the height adjustment slot during rotational wafer processing.

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Claim 19 (currently amended): An apparatus of claim 16, wherein the height adjustment slot includes,

~~a lower~~ an initial position; and

~~an upper~~ a last position,

wherein the pin is configured to slide from the ~~upper~~ last position in the height adjustment slot to the ~~lower~~ initial position in the height adjustment slot when completing rotational wafer processing.

Claims 20-30 (cancelled)